



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,645	10/27/2003	Timothy M. Morris	03-634	4007

34704 7590 12/06/2007
BACHMAN & LAPOINTE, P.C.
900 CHAPEL STREET
SUITE 1201
NEW HAVEN, CT 06510

EXAMINER

DINH, TIEN QUANG

ART UNIT	PAPER NUMBER
----------	--------------

3644

MAIL DATE	DELIVERY MODE
-----------	---------------

12/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/694,645
Filing Date: October 27, 2003
Appellant(s): MORRIS ET AL.

MAILED

DEC 06 2007

GROUP 3600

Barry L. Kelmachter
For Appellant

EXAMINER'S ANSWER

This is in response to the ordered changes to be made from the Board of Patent Appeals and Interferences on September 21, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4175701	Wojciehowski et al	11-1997
5752379	Shafer et al	5-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 20-25 and 32 are rejected under 35 USC 103 over Wojciehowski et al in view of Shafer et al.

Wojciehowski et al teaches a system for generating accessory power from a gas turbine engine that uses a pneumatically operated means 26 for receiving bleed air and controlled by a control valve 46 and for generating power to operate equipment onboard (see figure 1) on the aircraft but is silent on the means for monitoring which provides information about the change in power demand. However, Schafer et al teaches that FADECs (which has feedback loops) are well known in the art to monitor and control elements in an engine system are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have used FADECs in Wojciehowski et al's system as taught by Schafer et al to safely and efficiently generate power to operate the aircraft equipments. RE claim 32, please note that due to the pneumatically operated means, there are inherent increases to an amount of stall margin available to a high pressure compressor of the engine.

Claims 26, 27, 30, and 31 are rejected under 35 USC 103 over Wojciehowski et al in view of Shafer et al and admitted prior art on page 5, paragraph 28 of the specification.

Wojciehowski et al as modified by Schafer et al discloses all claimed parts except for the pneumatically integrated generators for supplying electrical or mechanical power. However, the admitted prior art on page 5, paragraph [0028] teaches that pneumatically integrated generators that supply electrical and mechanical powers are well known in the art.

It would have been obvious to one skilled in the art to have used additional pneumatically integrated generators in Wojciehowski et al's system as modified by Schafer et al and as taught by the admitted prior art on page 5, paragraph [0028] to generate power for other accessories. Please note that accessories such starter/generators, fuel pumps, etc. and gearboxes are well known in this day and age and one skilled in the art can used the pneumatically integrated generators to generate power to supply power to the accessories.

(10) Response to Argument

In response to applicant's arguments on independent claim 20, the Examiner would like to point out what it is that is being claimed. The claim calls for means for monitoring incipient change in power demand. Incipient is defined as "Beginning to exist or appear." The claim also calls for means for supplying bleed air from the engine during transient state in response to the at least monitored parameter and a pneumatically operated means to receive the bleed air and to generate power to operate the onboard equipment. Wojciehowski et al teaches an engine that uses air from a high pressure compressor to power an equipment that is in this case a pump to

operate a sprayer. Wojciehowski et al is silent on a monitoring means. Hence, Schafer et al was brought in to show that means to monitor (in this case, it is a FADEC system which applicant claims). The means to monitor is the FADEC system 12 as taught by Schafer et al. Now, when there is an incipient change in power demand (in this case, it is when the power lever 16 is pulled back in figure 1, there is an incipient change in power demand as monitored by the FADEC), the FADEC would monitor that there is a change in the power needed. When there is change in power demand, more fuel is being sent toward the engine. As the lever 16 is being pulled back further toward full, there is a transient state in which more and more fuel is being supplied to the engine. The FADEC system would clearly know that the pilot is requesting more power and hence more fuel is being supplied to the engine. Hence, the FADEC system as taught by Schafer et al teaches one skilled in the art that means for monitoring incipient change in power demand is well known. In addition, since Wojciehowski et al is an analog system that is without electronics, it is motivation to have used the FADEC system as taught by Schafer et al to allow optimal control of the whole system. Electronic means that are used to improve analog systems are very known in this day and age. See automobiles, aircrafts, etc.

Wojciehowski et al teaches a switch 86 that can provide information about the incipient change in power demand. The element 76 is the used in response to the incipient change in power demand and during the transient state. Hence, a FADEC system in Wojciehowski et al's system would allow the whole system to be monitored. The motivation of monitoring the whole operation of the system is to know how the system is operation and to optimize the use of bleed air from the engine to the pneumatic device.

Please note that even if the Wojciehowski et al reference has a feature to minimize parasitic load, the apparatus still meets what has been claimed.

RE claim 21, FADEC system monitors the position of the power lever 16 which indicates the incipient change in power demand.

Re claim 22, the FADEC system anticipates the claimed structure.

RE claim 23, please note that use of FADECs in Wojciehowski et al's system would lead to the opening or modulation by signals from the FADEC.

Re claim 24, there is a high compressor 14.

Re claim 25, the FADEC system as taught by Shafer et al has feedback loops.

Re claim 32, once the pneumatically operated means of Wojciehowski et al is operated, it increases the stall margin available to the compressor of the engine.

RE claims 26, 27, 30, and 31, please note that the admitted prior art teaches all that has been claimed. The use of these claimed pneumatically operated devices on the aircraft would increase the aircraft's capabilities. Any increases in capabilities would lead one skilled in the art to add parts to the aircraft so it can do more and operate efficiently. Furthermore, the applicant has not cited the criticalities to these parts.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

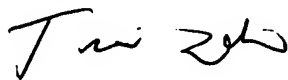
Application/Control Number:
10/694,645
Art Unit: 3644

Page 7

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

T. Dinh

A handwritten signature in cursive script, appearing to read 'T. Dinh'.

Conferees:

Peter Poon *PP*

John Woodrow Eldred *JWE*